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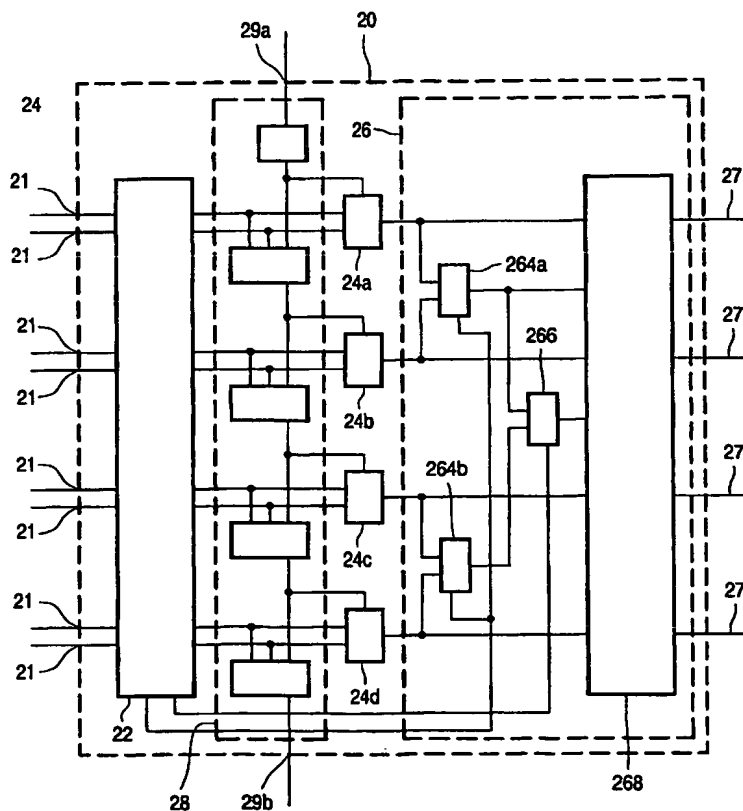
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[Continued on next page]

(54) Title: ELECTRONIC CIRCUIT WITH ARRAY OF PROGRAMMABLE LOGIC CELLS



(57) Abstract: An electronic circuit has a programmable logic cell with a plurality of programmable logic units that are capable of being configured to operate in a multi-bit operand mode and a random logic mode. The programmable logic units are coupled in parallel between an input circuit and an output circuit. The input circuit can be configured to supply logic input signals from the same combination of the logic inputs to the programmable logic units in the random logic mode. In the multi-bit operand processing mode the input circuit is configured to supply logic input signals from different ones of the logic inputs to the programmable logic units. The programmable logic units are coupled to successive positions along a carry chain at least in the multi-bit operand mode, so as to process carry signals from the carry chain. The output circuit selects an output signal from the programmable logic units under control of further input signals in the random logic mode and passes outputs from the programmable logic units in parallel in the multi-bit operand mode.

**Declaration under Rule 4.17:**

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TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

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**A. CLASSIFICATION OF SUBJECT MATTER**  
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**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	column 7, line 42-47; figure 10 ---	6
Y	US 5 920 202 A (BAPAT SHEKHAR ET AL) 6 July 1999 (1999-07-06) column 8, line 28-33; figure 4A ---	6
X	US 5 546 018 A (NEW BERNARD I ET AL) 13 August 1996 (1996-08-13) column 7, line 3 -column 11, line 15; figures 8A,8B,8C,8F,9A,9B column 12, line 29-44; figure 10 --- -/--	1,2,13



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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